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## PATENT ABSTRACTS OF JAPAN

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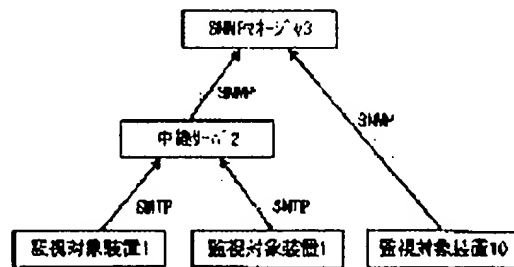
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## (54) REMOTE EQUIPMENT MONITORING SYSTEM

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide measures which allow monitoring by a SNMP manager even if a device has only a notice function of device information by an electronic mail.

SOLUTION: When the electronic mail to notify the occurrence of an alarm is sent by an SMTP from the monitoring object device 1 having a function for notifying the device information only by the SMTP, this electronic mail is converted into an SNMP at a relay server 2, and notified to an SNMP manager 3 by an SNMP trap. Accordingly, even if the device having only the notifying function of the device information by the electronic mail, the monitoring by the SNMP manager 3 becomes possible.



## LEGAL STATUS

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3. In the drawings, any words are not translated.

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CLAIMS

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[Claim(s)]

[Claim 1] Remote device monitoring system containing an SNMP manager who is characterized by providing the following and who supervises equipment for a monitor by SNMP, and equipment for a monitor which has a function which notifies equipment information by SMTP An SMTP receiving means to receive equipment information by SMTP notified from said equipment for a monitor into this system A SMTP/SNMP conversion means to change an SMTP message which received into an SNMP message An SNMP transmitting means to transmit a changed SNMP message to said SNMP manager

[Claim 2] Said SNMP manager is remote device monitoring system according to claim 1 characterized by having an SNMP transmitting means to require said missing SNMP message retransmission from said junction server when an SNMP message which was missing into an SNMP message which received from said junction server is detected.

[Claim 3] Remote device monitoring system according to claim 2 characterized by providing the following Said junction server is a conservation means to save equipment information by SMTP message notified from said received equipment for a monitor. An SNMP receiving means to receive said missing SNMP message-retransmission demand transmitted by said SNMP manager A means to read an SMTP message corresponding to said missing SNMP message from said conservation means, and to transmit to said SNMP manager via said SMTP/SNMP conversion means and said SNMP transmitting means

[Claim 4] Remote device monitoring system according to claim 1 to 3 characterized by attaching a unique numeric value which related with the transmitting sequence and was made into each SMTP message notified from said equipment for a monitor.

[Claim 5] Said SNMP manager is remote device monitoring system according to claim 2 characterized by performing a resending demand by transmitting said unique numeric value corresponding to [ have a means by which said unique numeric value detects lack of an SNMP message which received from said junction server, and ] said missing SNMP message in said SNMP transmitting means.

[Claim 6] A junction server characterized by providing the following An SNMP manager who supervises equipment for a monitor by SNMP An SMTP receiving means to receive equipment information by SMTP which is arranged in remote device monitoring system containing equipment for a monitor which has a function which notifies equipment information by SMTP, and is notified from said equipment for a monitor A SMTP/SNMP conversion means to change an SMTP message which received into an SNMP message An SNMP transmitting means to transmit a changed SNMP message to said SNMP manager

[Claim 7] A junction server characterized by providing the following An SNMP manager who supervises equipment for a monitor by SNMP An SMTP receiving means to receive equipment information by SMTP which is arranged in remote device monitoring system containing equipment for a monitor which has a function which notifies equipment information by SMTP, and is notified from

said equipment for a monitor A conservation means to save equipment information by SMTP message notified from said received equipment for a monitor A SMTP/SNMP conversion means change an SMTP message which received into an SNMP message, an SNMP transmitting means transmit a changed SNMP message to said SNMP manager, an SNMP receiving means receive the SNMP message-retransmission demand which was missing from said SNMP manager, and a means read an SMTP message corresponding to said missing SNMP message from said conservation means, and transmit to said SNMP manager via said SMTP / SNMP conversion means, and said SNMP transmitting means

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[Translation done.]